

SIDEBAR

Learning Losses and COVID-19: The Pandemic's Potential Long-Term Impact on Students

Studies from the Annenberg Institute at Brown University and the Center for Research on Education Outcomes (CREDO) at Stanford University project that there may be substantial learning losses for students because of the COVID-19 pandemic. These studies estimate, for example, that some students may lose up to a full year of math learning. These studies find that learning losses are not distributed evenly among all students and that some groups of students may be more negatively affected than others, such as students from low-income households or those with disabilities. These researchers caution that the results of these projections are estimates and should be interpreted carefully. However, based on their research, they conclude that the educational disruptions caused by the COVID-19 pandemic have the potential to negatively affect student learning and education. As a result, they suggest, schools should allocate additional resources to help students, especially the most vulnerable, accelerate their learning and regain these losses (CREDO 2020, Kuhfeld et al. 2020).

A report from the Annenberg Institute at Brown University estimates that students began the 2020–21 school year with a third to a half of the learning gains in math relative to a normal school year (Kuhfeld et al. 2020). The study used data from 5 million student test scores and utilized models based on student learning loss due to absenteeism, school closures, and summer break to project the effects of COVID-19 educational disruptions on student learning from spring 2020 (when most schools temporarily closed and then shifted to online instruction) through fall 2020 (the start of the 2020–21 school year). The authors note that their estimated reduction in the expected year-to-year math gains is not evenly distributed; some students may experience little loss, while others, particularly those from low-income households and students who were already low performing, may experience greater losses. The authors estimate that these more vulnerable students may have returned to school in fall 2020 already nearly a full year behind in math.

CREDO also estimates that some students may have lost up to a year of learning in math (CREDO 2020). The researchers used information based on prior years' achievement scores, days of instruction lost due to the pandemic, and projected learning losses associated with out-of-school time to estimate the amount of learning students lost by the end of the 2019–20 school year. CREDO provided estimates for 19 states and suggested that these learning losses could result from students not learning new concepts and not experiencing reinforcement of concepts already learned.

In a paper from the World Bank, researchers used data from 157 countries to estimate global learning losses due to education disruptions caused by COVID-19 and determined that students on average could lose from a third of a year to almost a full year of schooling as a result of the pandemic (Azevedo et al. 2020). They also estimated larger losses for more vulnerable groups, including ethnic minorities and students with disabilities, who could be more adversely affected by school closures.

In addition to estimating learning losses, researchers have estimated the economic impact of education losses resulting from COVID-19. These projections reflect current thinking about the economic impact of these losses, but they are based on economic conditions that are subject to change over time. As with learning loss, however, most researchers do agree that there will likely be some economic impact due to education losses resulting from the pandemic. A report from the Organisation for Economic Co-operation and Development estimates that the global closure of schools could lead to a 3% lower income for K–12 students over their lifetime and a corresponding average of 1.5% lower annual gross domestic product for countries for the remainder of the century (Hanushek and Woessmann 2020). A report from McKinsey Insights estimates that the average K–12 student in the United States could lose the equivalent of a year of full-time work income over the course of his or her lifetime, and these losses may be higher for Black and Hispanic students (Dorn et al. 2020).